UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OCT -5 1998

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

MEMORANDUM:

SUBJECT: Hydrolysis study of 1,2-Benzisothiazole-3(2H)-one

From: Akiva D. Abramovitch, Ph.D.
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To: Marshall Swindell
PM 33

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Norm Cook, Chief 10.05.98
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DP Barcode:249647.

Pesticide Chemical No.:098901

EPA MRID:441821-01(response)

Review Time: 1 day

A. The registrant, Cincinnati Specialties, submitted the hydrolysis study of December 17, 1996 in support of the registration of 1,2-Benzisothiazol-3(2H)-one as antimicrobial. The review of the study found that additional information was required in order to evaluate whether the study was acceptable.

B. The registrant satisfied the hydrolysis data requirement for the registration of 1,2-benzisothiazol-3(2H)-one since **the study was upgraded to acceptable with additional information.**

The AD accepts the data submitted by the registrant that the active ingredient is stable to hydrolysis. The results of the study indicated that degradation (hydrolysis) were not significant with 1,2-benzisothiazol-3(2H)-one at pH 5, 7 and 9 at 30^{0}C within the 30 days study period.

The registrant specified the purity of the test material at 100% and provided the analytical method for the assay. Also the registrant clarified that since the active ingredient is resistant to microbial degradation and photodegradation it was not necessary to sterilize the equipment and/or prevent sunlight exposure. Also, the test vials were sealed to prevent loss of volatiles and there was no loss of material balance during the 30 days study period.

The initial study review cited several major deficiencies:

Some of the major deficiencies relate to lack of sufficient information in the experimental section:

a) The purity of the test material was not specified.

b) It was not specified whether the study was run under sterile conditions to prevent microbial degradation.

c) It was not reported whether precautions were taken to avoid photodegradation with exposure to sunlight.

d) The concentration of the corresponding buffers and how pH was adjusted and monitored during the study period were not specified.

e) The use of traps to account for all volatiles and a complete material balance was not reported.

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